

Attachment A

CLAIM AMENDMENTS

Please amend Claims 1, 8, 9, 11, 15, 19, 20, and 24 as follows:

1. (Currently Amended) A method of switching fabric port mapping for a switching fabric, the method comprising:
 associating line ingress queues with logical fabric ports;
 broadcasting, via the switching fabric, fabric specific broadcast control cells to all physical ports on all shelves attached to the switching fabric, the broadcast control cells containing the current logical to physical port mappings; and
 forwarding based on which packets in the line ingress queues are to be forwarded by the switching fabric based on the logical to physical port mappings,
 wherein the broadcast control cells are transmitted via the switching fabric updates to the logical to physical port mappings are managed locally by a manager on each of the shelves, and broadcasts of the logical to physical port mappings are sent globally to all of the physical ports on all of the shelves.
2. (Previously Presented) The method of claim 1 further comprising:
 storing the logical to physical port mappings in a plurality of traffic management circuits, each of the traffic management circuits providing an interface between the switching fabric and a line card.
3. (Original) The method of claim 1, wherein the presence of a line card on a given fabric logical port is propagated to all other line cards in the system.
4. (Previously Presented) The method of claim 1, wherein tables of the logical to physical port mappings are updated by a fabric control cell mechanism.
5. (Previously Presented) The method of claim 4, wherein the fabric control cell mechanism immediately broadcasts a change in the logical to physical port mappings upon the failure of an active line card.
6. (Previously Presented) The method of claim 5, wherein the fabric control cell

mechanism periodically broadcasts the current logical to physical port mappings.

7. (Original) The method of claim 6, wherein there are instances of multiple fabric control cell broadcasts ongoing.

8. (Currently Amended) The method of claim 7, wherein the broadcasts are controlled-initiated by a shelf manager on one of the shelves that has at least one physical port impacted by the updates to the logical to physical port mappings.

9. (Currently Amended) The method of claim 8, wherein the shelf managers on all of the shelves periodically send out the broadcast control cells for all line card slots.

10. (Previously Presented) The method of claim 6, wherein the periodic broadcasts are made even when there is no line card in a given line card slot.

11. (Currently Amended) A switching fabric port mapping apparatus for a switching fabric, the apparatus comprising:

means for associating line ingress queues to logical fabric ports; and
means for broadcasting, via the switching fabric, logical to physical port mappings to all physical ports and all shelves attached to the switching fabric,
wherein packets in the line ingress queues are to be forwarded by the switching fabric, and

wherein updates to the logical to physical port mappings are managed locally by a manager on each of the shelves, and broadcasts of the logical to physical port mappings are sent globally to all of the physical ports on all of the shelves the broadcasting is via the switching fabric.

12. (Previously Presented) The apparatus of claim 11, wherein each of the line ingress queues is associated with a logical destination port.

13. (Original) The apparatus of claim 11, wherein the logical fabric ports are globally managed.

14. (Previously Presented) The apparatus of claim 11 further comprising:
means for storing the logical to physical port mappings, each means for storing

providing an interface between the switching fabric and a line card.

15. (Currently Amended) A switching fabric port mapping apparatus for a switching fabric, the apparatus comprising:

 circuitry to associate line ingress queues to logical fabric ports; and

 circuitry to broadcast, via the switch fabric, logical to physical port mappings to all physical ports and all shelves attached to the switching fabric,

 wherein packets in the line ingress queues are to be forwarded by the switching fabric, and

 wherein updates to the logical to physical port mappings are managed locally by a manager on each of the shelves, and broadcasts of the logical to physical port mappings are sent globally to all of the physical ports on all of the shelves~~the broadcast is via the switching fabric~~.

16. (Previously Presented) The apparatus of claim 15, wherein the logical fabric ports are globally managed.

17. (Previously Presented) The apparatus of claim 15 further comprising:

 a plurality of traffic management circuits, each storing the logical to physical port mappings and providing an interface between the switching fabric and one of the source line cards and the destination line cards.

18. (Original) The apparatus of claim 15, wherein there are instances of multiple control cell broadcasts ongoing.

19. (Currently Amended) A medium readable by a computing device, the medium storing instructions, which when executed by the computing device causes the computing device to perform operations comprising:

 associating line ingress queues to logical fabric ports; and

 broadcasting logical to physical port mappings, via the switching fabric, to all physical ports and all shelves attached to the switching fabric,

 wherein packets in the line ingress queues are forwarded by the switching fabric, and

wherein updates to the logical to physical port mappings are managed locally by a manager on each of the shelves, and broadcasts of the logical to physical port mappings are sent globally to all of the physical ports on all of the shelves~~the broadcasting is via the switching fabric.~~

20. (Currently Amended) A switching fabric port mapping system comprising:
a multi-shelf switching fabric;
source line cards, each associated with a plurality of line ingress queues;
destination line cards; and
a broadcast control mechanism which updates~~broadcasts, via the switching fabric,~~
logical to physical port mappings to all physical ports and all shelves attached to the switching fabric;
wherein packets in the line ingress queues are ~~to be~~ forwarded by the switching fabric based on the updated logical to physical mappings, and
wherein the~~updates of~~to the logical to physical port mappings are managed
locally by a manager on each of the shelves, and broadcasts of the logical to physical port mappings are sent globally to all of the physical ports on all of the shelves~~transmitted via the switching fabric.~~

21. (Previously Presented) The system of claim 20, further comprising a plurality of traffic management circuits, each storing the logical to physical port mappings and providing an interface between the switching fabric and one of the source line cards and the destination line cards.

22. (Previously Presented) The system of claim 20, wherein the mappings are executed in a multi-shelf switching environment.

23. (Original) The system of claim 20, wherein mapping tables are updated by a fabric control cell mechanism.

24. (Currently Amended) A method of switching fabric port mapping for a switching fabric, the method comprising:
broadcasting fabric specific broadcast control cells;

transmitting the broadcast control cells, via the switching fabric, to all physical ports on all shelves attached to the switching fabric, the broadcast control cells containing logical to physical port mappings;

terminating the broadcast control cells with a traffic management circuits, each of the traffic management circuits associated with a line card;

updating a port mapping table stored on each of the traffic management circuits according to the broadcast control cells; and

mapping ingress queues to logical fabric ports instead of the physical fabric ports based on updated port mapping tables;

wherein updates to the port mapping tables are managed locally by a manager on each of the shelves, and broadcasts of the logical to physical port mappings are sent globally to all of the physical ports on all of the shelves, ~~the shelf's logical to physical port mapping is managed locally and the shelf's port mapping table updates are managed globally, and~~

~~wherein the broadcast control cells are transmitted via the switching fabric.~~

25. (Previously Presented) The method of claim 24, wherein the traffic management circuit associated with the line card is an interface between the line card and the switching fabric.

26. (Original) The method of claim 24, wherein a fabric control mechanism supports either 1 for 1 sparing or 1 for N sparing.

27. (Previously Presented) The medium of claim 19 wherein the instructions cause the computing device to store the logical to physical port mappings in a plurality of traffic management circuits, each of the traffic management circuits providing an interface between the switching fabric and a line card.